

We claim:

- 1 1. A system for providing location-based translation services through a wireless  
2 device, the system comprising:  
3 a network node storing data related to probable languages spoken according to  
4 geographic location, the network node transmitting to the wireless device a target  
5 language according to the location of the wireless device.
- 1 2. The system for providing location-based translation services through a wireless  
2 device of claim 1, wherein a user, from a status of being able to generally choose  
3 applications on the wireless device, may select translation services via a single input to the  
4 wireless device and wherein the target translation language will be pre-selected.
- 1 3. A system for providing location-based translation services through a wireless  
2 device, the system being capable of receiving global positioning system information  
3 regarding a location of the wireless device, the system comprising:  
4 a database of language information associating probable languages spoken in any  
5 given area; and  
6 a network node that receives location information regarding the wireless device  
7 from the global positioning system and transmits to the wireless device a prioritized list  
8 of at least one probable target language based on the location of the wireless device,  
9 wherein when a user selects translation service on the wireless device, the most probable  
10 target language is pre-selected.
- 1 4. The system for providing location-based translation services through a wireless  
2 device of claim 3, wherein a translation language choice menu on the wireless device  
3 includes the prioritized list of at least one probable target language based on the location  
4 of the wireless device.

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1 5. An apparatus for providing location-based translation services to a wireless  
2 device, the apparatus receiving a location of the wireless device, the apparatus  
3 comprising:  
4 a processor; and  
5 a language and location database module storing at least one target language  
6 according to geographic area, wherein the processor is coupled to the language and  
7 location database and using the location of the wireless device, the language and location  
8 database module returns at least one target language for transmission to the wireless  
9 device through a wireless network.

1 6. The apparatus for providing location-based translation services to a wireless  
2 device of claim 5, wherein the apparatus further comprises a network node coupled to  
3 the processor, the network node transmitting the at least one target language to the  
4 wireless device such that when a user selects translation services on the wireless device, a  
5 highest priority language of the at least one target language is pre-selected.

1 7. A method of providing location-based translation services on a wireless device,  
2 the method comprising:  
3 determining a location of the wireless device;  
4 associating the location of the wireless device with the most probable target  
5 language spoken at the location; and  
6 pre-selecting the most probable target language, wherein when a user selects  
7 language translation services, the wireless device translates source speech into the target  
8 language without further user language selection action.

1 8. The method of providing location information based translation service on a  
2 wireless device of claim 7, further comprising:  
3 associating the location of the wireless device with a group of prioritized  
4 probable target languages.

1 9. The method of providing location information based translation service on a  
2 wireless device of claim 8, further comprising:

3 presenting the user with a menu of the group of prioritized probable target  
4 languages if the user indicates a desire for a language other than the pre-selected most  
5 probable language.

1 10. A method of providing location-based translation services on a wireless device,  
2 the method comprising:

3 determining a location of the wireless device;

4 associating the location of the wireless device with a probable target language;

5 transmitting data associated with the probable target language to the wireless

6 device; and

7 prioritizing the probable target language in a menu system on the wireless device,  
8 such that when a user selects a translation services application from a general application  
9 choice status, the probable target language is pre-selected.

1 11. The method of providing location-based translation services on a wireless device  
2 of claim 10, wherein determining a location of the wireless device further comprises  
3 using a wireless network based location determining means.

1 12. The method of providing location-based translation services on a wireless device  
2 of claim 10, wherein determining a location of the wireless device further comprises  
3 using a global positioning system that determines the location of the wireless device.

1 13. The method of providing location-based translation services on a wireless device  
2 of claim 11, wherein associating the location of the wireless device with a probable target  
3 language further comprises comparing demographic data in a network node associated  
4 with cell sites served by the network node with the location of the wireless device.

1 14. The method of providing location-based translation services on a wireless device  
2 of claim 12, wherein associating the location of the wireless device with a probable target

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3 language further comprises comparing the location of the wireless device determined by  
4 the GPS system to a map of demographic data including target language information.

1 15. A method of providing location-based translation services on a wireless device,  
2 the method comprising:

3 receiving a target language based on the location of the wireless device; and  
4 prioritizing the target language in a menu system on the wireless device, such that  
5 when a user desires language translation for the target language, the user selects a  
6 translation service application from a general application choice status, and the target  
7 language is pre-selected.

1 16. A method of providing location-based translation services on a wireless device,  
2 the method comprising:

3 receiving a probable language spoken based on the location of the wireless  
4 device;  
5 prioritizing the probable language in a menu system on the wireless device; and  
6 upon receiving a single click request for translation service from a user,  
7 presenting an interactive dialog window for translation services for the probable  
8 language.

1 17. A method of providing location-based language translation service, the method  
2 comprising:

3 receiving via a wireless connection at the wireless device a group of prioritized  
4 probable languages spoken according to the location of the wireless device;  
5 updating a language translation menu according to the group of prioritized  
6 probable languages spoken; and  
7 upon a single click request from a user, presenting the user with a dialogue  
8 window for translation services for a most probable language spoken from the group of  
9 prioritized probable languages spoken.

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- 1 18. The method of claim 17, further comprising presenting the user with a menu  
2 option to select other languages from the group of prioritized probable languages  
3 spoken.
- 1 19. A method of providing location-based translation services on a wireless device,  
2 the method comprising:  
3 storing at a network node a probable target language in cell sites associated with  
4 the network node;  
5 transmitting the probable target language to the wireless device located one of the  
6 cell sites associated with the network node;  
7 prioritizing the probable target language in a menu system on the wireless device;  
8 and  
9 upon receiving a translation request from a user from a general application choice  
10 status of the wireless device, presenting the user with a translation dialogue window pre-  
11 selected for the probable language.
- 1 20. A method of multi-modal interaction with users using a device for language  
2 translation, the method comprising:  
3 receiving a first message in a first language;  
4 providing associated first text of the received message in a first window; and  
5 upon user approval of the first text, translating the first text into a second  
6 language and providing second text in a second window in the second language.
- 1 21. The method of multi-modal interaction with users using a device for language  
2 translation of claim 20, further comprising:  
3 audibly speaking from the device in the second language a translation of the first  
4 message.
- 1 22. The method of multi-modal interaction with users using a device for language  
2 translation of claim 20, further comprising:

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3 providing instructions in the second language for how to speak a message in the  
4 second language for translation into the first language.

1 23. A method of multi-modal interaction with a first user and a second user through  
2 a language translation device, the method comprising:

3 receiving a first message in a first language;

4 providing a first message text in the first language in a first window;

5 upon the first user approval of the first message text, translating the first message  
6 text into a second language and providing the first message text in a second window in  
7 the second language;

8 receiving a second message in the second language;

9 providing a second message text in the second window in the second language;

10 and

11 upon the second user approval of the second message text, translating the second  
12 message text into the first language and providing the second message text in the first  
13 window in the first language.

1 24. The method of multi-modal interaction with a first user and a second user  
2 through a language translation device of claim 23, wherein the second language is pre-  
3 selected according to the location of the device.

1 25. The method of multi-modal interaction with a first user and a second user  
2 through a language translation device, further comprising:

3 receiving from a wireless network a group of languages prioritized by probable  
4 need according to a location of the device, wherein the second language has the highest  
5 probability of needing translation.

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